Miscellaneous Notes

1. RECORD OF THE BAT *SCOTOPHILUS TEMMINCKI* HORSFIELD (VESPERTILIONIDAE) FROM RAJASTHAN

The bat, Scotophilus temmincki Horsfield, although wide spread in India has hitherto not been recorded from Rajasthan. Recently I obtained a female from eastern Rajasthan (P.W.D. Rest House, Bharatpur on 17-x-1973, at night between 8 and 10 p.m. in a mist net). Colour of fur: rufous brown above, dirty white below. Measurements (in mm) as follows:

Head and body, 66; ear, 15; tragus, 7; tail, 42; tibia, 19; foot including claws, 10; fore arm, 50.

Skull: Total length, 18.2; zygomatic width, 12.5; cranial width, 9; maxillary width (m^3-m^3) , 8.3; canine width (c^1-c^1) , 6; length of upper tooth row $(c-m^3)$, 6.5; length of lower tooth row $(c-m_3)$, 7.2; mandibular length, 13.5.

According to Ellerman & Morrison-Scott (1951, p. 178-9)¹ S. temmincki is an oriental species with five subspecies of which S. t. wroughtoni alone occurs in India.

DESERT REGIONAL STATION, ZOOLOGICAL SURVEY OF INDIA, PAOTA, JODHPUR, January 24, 1974. Y. P. SINHA

2. MATERNAL BEHAVIOUR OF A DESERT GERBIL

One fine evening, early in July 1974, at about 6 p.m., my son watering our kitchen garden at our house in the Central Arid Zone Research Institute, Jodhpur campus, was alarmed by a peculiar noise caused by movements of some small animals fighting in the dried leaves of the Lantana hedge. A snake emerged out of the hedge and started climbing it. Surprisingly, the snake was being chased by a Desert Gerbil. We observed the rodent quickly biting the tail of the snake which was later identified as Coluber sp. I hit the snake with a stick and as it struggled, a newborn Gerbil dropped from the mouth of the snake. The mother

¹ ELLERMAN, J. R. & MORRISON-SCOTT, T. C. S. (1951): Checklist of Palaeartic and Indian Mammals, British Museum (Nat. Hist.), London.

Gerbil which was watching nearby quickly dashed in and picked up its offspring by the 'neck grip' and retired with it into a nearby burrow.

On examination of the dead snake, it was found that about 15 cm of its tail had been badly 'mauled' by the Gerbil.

The whole incident reflects a strong maternal bond in the Desert Gerbil for its young even at the risk of its own life.

CENTRAL ARID ZONE RESEARCH INSTITUTE, JODHPUR, October 4, 1974. K. D. MUTHANA

3. NESTING BEHAVIOUR OF MUS MUSCULUS BACTRIANUS BLYTH IN THE LABORATORY

(With a text-figure)

Information on nesting behaviour of *Mus musculus bactrianus* Blyth is meagre and therefore the present study was undertaken. Seven pairs of mice were kept for 5 to 6 months in cages before the start of the experiments, to acclimatize them to laboratory conditions and to one another. They were provided with 2 nest-boxes one in each half of the cage. Rice straw was provided at weekly intervals for building nests. The straw used for nest-building, either inside or outside the nest-box, was removed daily and weighed after clearing the nest-boxes and counting the nests. The nesting behaviour was studied from January to May and during the reproductive cycles.

- 1. Nesting behaviour in different months:
- (i) Nesting efficiency: The nesting pairs of the mouse used variable amounts of rice-straw for nest-building and the number of nests also varied from month to month, the variation being highly significant. The mean amount of nesting material used per day by one pair (n = 7) decreased from 4.536 g in February to 28 mg in May (Table 1). Similarly, the mean number of nests built per day per pair decreased from 1.05 in February to 0.05 in May (Table 2).

Thus it is clear that as the season warmed up, the frequency as well as the efficiency for nest-building decreased considerably. Denenberg et al. (1969)¹ reported that when male and female rats were exposed to cool ambient temperatures, dowel-shredding for nest-building increased markedly, whereas the exposing of the females to a warm environment stopped the dowel-shredding behaviour.

(ii) Nesting site: There were only 2 options for the mice to build

¹ DENENBERG, V. H., TAYLOR, R. E. & ZARROW, M. X. (1969): Maternal behaviour in the rat. An investigation and quantification of nest building. *Behaviour*, 34:1-16.